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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/802,136	NOMURA ET AL.	
	Examiner	Art Unit	
	CHAN S. PARK	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 31 March 2008.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-39 is/are pending in the application.
 4a) Of the above claim(s) 37-39 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-36 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 17 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 6/14/04 & 3/22/06.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 37-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/31/08.

Specification

2. The corrected or substitute specification was received on 3/17/04. The specification is acceptable.

Claim Objections

3. Claims are objected to because of the following informalities:

Claim 5, line 6, "selecting an image" should be -- selecting an-images --;

Claim 6, lines 3-4, "the plural image scanning device" should be -- the plural image scanning devices --;

Claim 6, line 7, "screen;" should be -- screen; and --;

Claim 17, line 6, "select an image" should be -- select an-images --;

Claim 18, line 4, "the plural image scanning device" should be -- the plural image scanning devices --;

Claim 18, line 7, "screen;" should be -- screen; and --;

Claim 29, line 6, "select an image" should be -- select an-images --;

Claim 30, line 5, "the plural image scanning device" should be -- ~~the~~ plural image scanning devices --; and

Claim 30, line 8, "screen;" should be -- screen; and --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 25-36** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 25-36 are drawn to functional descriptive material NOT claimed as residing on a computer readable medium. MPEP 2106.IV.B.1(a) (Functional Descriptive Material) states:

"Data structures not claimed as embodied in a computer-readable medium are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer."

"Such claimed data structures do not define any structural or functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized."

Also, refer to page 53 of the Interim Guideline.

Claims 25-36, while defining a computer program product, do not define a "computer-readable medium" and is thus non-statutory for that reason. A computer program product can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending

the claim to state, “A computer-readable medium encoded with a computer program...” in order to make the claim statutory.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-9, 12, 18-21, 24, 30-33 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation of “image-processing the extracted each image data”. It is unclear as to where the image data is extracted from. Is the image extracted from the preview screen or a storage means of the scanning device? For examining purpose, the extracted image data is construed as one of the image data representing the image on the frame.

Claim 7 recites the limitation of “the image data of the adjusted plurality of images”. It is unclear if the adjusted images are referring the extracted image data in claim 6. For examining purpose, the adjusted images are construed as the image processed image data.

Claim 8 recites the limitation of “dimension is different from it”. It is unclear if this “it” is referring to the dimension of the image data or the dimension of the frame of trimming area. For examining purpose, “it” is construed as the dimension of the image data.

Claim 9 recites the limitation of “dimension is different from it”. It is unclear if this “it” is referring to the dimension of the image data or the dimension of the frame of trimming area. For examining purpose, “it” is construed as the dimension of the image data.

Claim 12 recites the limitation of “the first trimming area setting mode is allowed that an area after the trimming processing protrudes from the area of the input image data” and “the second area setting mode is restricted that an area after that the trimming processing protrudes from the area of the input image data”. It is unclear as to what exactly is being allowed or restricted. Is the first setting mode itself always allowed and is the second setting mode itself always restricted? Furthermore, it is confusing as to what exactly is happening to the “area after that the trimming processing protrudes from the area of the input image data”. For examining purpose, these two modes are construed as the trimming permission mode and the trimming prohibition mode.

With respect to claims 18 and 30, arguments analogous to those presented for claim 6, are applicable.

With respect to claims 19 and 31, arguments analogous to those presented for claim 7, are applicable.

With respect to claims 20 and 32, arguments analogous to those presented for claim 8, are applicable.

With respect to claims 21 and 33, arguments analogous to those presented for claim 9, are applicable.

With respect to claims 24 and 36, arguments analogous to those presented for claim 12, are applicable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 6-9, 18-21 and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusunoki U.S. Patent Application No. 2002/0048413.

With respect to claim 6, Kusunoki discloses an image processing method comprising steps of:

obtaining input image data representing an image on one frame (the composite image shown in frame of fig. 10D or fig. 12), wherein the image data are inputted from plural image scanning device (PC 12 receiving image data from scanning devices 14 & 15 in paragraph 33);

displaying the obtained input image data on a first preview screen so that the image on one frame is displayed as an image on the screen (displaying the image data in a template/frame selected in paragraph 111); and

image-processing the extracted each image data based on the image quality adjustment value of respective the image data (applying image processing to the image data according to the manual image adjustment values in paragraph 70).

With respect to claim 7, Kusunoki discloses the image processing method of claim 6, wherein the image data of the adjusted plurality of images is stored in a single image recording medium (note that all image processed image data are stored in a single RAM 20 for printing in paragraph 117, lines 1-5).

With respect to claim 8, Kusunoki discloses an image processing method for trimming an image comprising steps of:

obtaining input image data representing an image on one frame (obtaining image data from the input device in paragraph 60),

displaying an image of the obtained input image data and a frame of trimming area which is defined in a rectangle shape (displaying the image data with the crop boundary 84 in paragraph 92 & fig. 4), and

designating an area of the frame whose shape is similar to the rectangle, and whose dimension is different from it for trimming (designating the boundary that is different from the dimension of the image data in paragraph 93),

wherein the origin for adjusting the dimension of the area can be designated to any one of each of apexes of the rectangle and the center of gravity of the rectangle (adjusting the dimension of the boundary by gripping and moving one corner of the boundary in paragraph 92, lines 10-12).

With respect to claim 9, Kusunoki discloses an image processing method for trimming an image; comprising steps of:

obtaining input image data representing an image on one frame (obtaining image data from the input device in paragraph 60),

displaying an image of the obtained input image data on and a frame of trimming area which is defined in a predetermined shape (displaying the image data with the crop boundary 84 in paragraph 92 & fig. 4), and

designating an area of the frame whose shape is similar to the predetermined shape, and whose dimension is different from it for trimming (designating the boundary that is different from the dimension of the image data in paragraph 93),

wherein the origin for adjusting the dimension of the area can be designated to any one of each of apexes of the rectangle which circumscribes the predetermined shape, and the center of gravity of the rectangle (adjusting the dimension of the boundary by gripping and moving one corner of the boundary in paragraph 92, lines 10-12).

With respect to claims 18-21, arguments analogous to those presented for claims 6-9, are applicable respectively.

With respect to claims 30-33, arguments analogous to those presented for claims 6-9, are applicable respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 8 above, and further in view of Politis U.S. Patent No. 6,191,797.

With respect to claim 10, Kusunoki teaches the image processing method of claim 8, but it does not explicitly teach that the trimming area is set by rotating the rectangle, wherein the origin for rotating the area can be set to any one of each of apexes of the rectangle and the center of gravity of the rectangle.

Politis teaches the method of setting the trimming area by rotating the trimming rectangle, wherein the origin for rotating the area can be set to any one of each of apexes of the rectangle and the center of gravity of the rectangle (col. 8, lines 7-12).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image processing method of Kusunoki to include the method of setting the trimming area by rotating the trimming rectangle as taught by Politis.

The suggestion/motivation for doing so would have been to provide and trim the different area/shape of the image data by rotating the trimming rectangle.

Therefore, it would have been obvious to combine Kusunoki with Politis to obtain the invention as specified in claim 10.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 20 above, and further in view of Politis.

With respect to claim 22, arguments analogous to those presented for claim 10, are applicable.

9. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 32 above, and further in view of Politis.

With respect to claim 34, arguments analogous to those presented for claim 10, are applicable.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 9 above, and further in view of Politis.

With respect to claim 11, Kusunoki teaches the image processing method of claim 9, but it does not explicitly teach that the trimming area is set by rotating the predetermined shape, and the trimming processing is conducted, the origin for rotating the area can be set to any one of each of apexes of the rectangle and the center of gravity of the rectangle.

Politis teaches the method of setting the trimming area by rotating the trimming rectangle, wherein the origin for rotating the area can be set to any one of each of apexes of the rectangle and the center of gravity of the rectangle (col. 8, lines 7-12).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image processing method of Kusunoki to include the method of setting the trimming area by rotating the trimming rectangle as taught by Politis.

The suggestion/motivation for doing so would have been to provide and trim the different area/shape of the image data by rotating the trimming rectangle.

Therefore, it would have been obvious to combine Kusunoki with Politis to obtain the invention as specified in claim 11.

11. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 21 above, and further in view of Politis.

With respect to claim 23, arguments analogous to those presented for claim 11, are applicable.

12. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 33 above, and further in view of Politis.

With respect to claim 35, arguments analogous to those presented for claim 11, are applicable.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 8 above, and further in view of Enomoto U.S. Patent No. 6,801,334.

With respect to claim 12, Kusunoki teaches the image processing method of claim 8, but it does not explicitly teach the step of:

switching any one of a first trimming area setting mode and a second trimming area setting mode, wherein the first trimming area setting mode is allowed that an area after the trimming processing protrudes from the area of the input image data, the second area setting mode is restricted that an area after the trimming processing protrudes from the area of the input image data.

Enomoto teaches the image processing method of switching any one of a first trimming area setting mode and a second trimming area setting mode (determining whether to trim the image data based on the region the user specified in fig. 17C & col.

58, lines 61-64), wherein the first trimming area setting mode is allowed that an area after the trimming processing protrudes from the area of the input image data (allowing the trimming/cropping process in col. 59, lines 21-32), the second area setting mode is restricted that an area after the trimming processing protrudes from the area of the input image data (restricting the trimming/cropping process in col. 59, lines 3-10).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image processing method of Kusunoki to include the image trimming permitted/inhibited region as taught by Enomoto.

The suggestion/motivation for doing so would have been to provide a method for allowing/regulating a certain region of the image data for the image cropping/trimming to enhance the overall image quality (fig. 18 of Enomoto).

Therefore, it would have been obvious to combine Kusunoki with Enomoto to obtain the invention as specified in claim 12.

14. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 20 above, and further in view of Enomoto.

With respect to claim 24, arguments analogous to those presented for claim 12, are applicable.

15. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki as applied to claim 32 above, and further in view of Enomoto.

With respect to claim 36, arguments analogous to those presented for claim 12, are applicable.

16. Claims 1-5, 13-17 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. U.S. Patent No. 6,940,526 (hereinafter Noda) in view of Maruyama U.S. Patent No. 5,794,104 (hereinafter Maruyama).

With respect to claim 1, Noda teaches an image processing method comprising steps of:

obtaining input image data representing an image on one frame (obtaining an image data via SCSI interface 30 in col. 4, lines 20-39);

displaying the obtained input image data on a first preview screen so that the image on one frame is displayed as an image on the first preview screen (displaying the obtained image data in the first sub display area 38 in col. 6, lines 14-29);

setting an image area in the displayed image on the first preview screen so that sub image is separately enclosed with the image area in the displayed image on the first preview screen (setting a cropping area 84 in fig. 14 & col. 14, lines 11-16);

extracting sub image data corresponding to the sub image enclosed with the image area from the input image data (extracting the cropping area for synthesizing the images in col. 14, lines 5-26); and

displaying the extracted sub image data on a second preview screen (main screen 37 in fig. 14) so that the sub image is separately displayed in a frame on the second preview screen (displaying the synthesized image with the cropped image in col. 14, lines 17-27).

Noda, however, does not explicitly teach the method of setting plural image areas for extracting plural sub images in the first preview screen and displaying the extracted plural sub image data on the second preview screen.

Maruyama teaches an image processing method comprising steps of:
obtaining input image data representing an image on one frame (reading an original image in col. 3, lines 1-11);
displaying the obtained input image data on a first preview screen so that the image on one frame is displayed as an image on the first preview screen (displaying the scanned original image in fig. 15(a));
setting plural image areas in the displayed image on the first preview screen so that plural sub images are separately enclosed with the plural image areas in the displayed image on the first preview screen (setting plural trimming frames according to col. 10, lines 16-27);
extracting plural sub image data corresponding to the plural sub images enclosed with the plural image areas from the input image data (extracting of the trimmed images for image processing in col. 10, lines 24-27); and
printing the plural sub image data on a paper so that the plural sub images are separately printed in on the paper (printing the trimmed frame images in fig. 15 (c)~(d)).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the image processing apparatus of Noda to include the function of setting a plurality of image areas for cropping/extracting sub image data in a single image data as taught by Maruyama.

The suggestion/motivation for doing so would have been to provide a method of setting a plurality of trimming areas on a single image data at once (col. 10, lines 16-27 of Maruyama)

Therefore, it would have been obvious to combine Noda with Maruyama to obtain the invention as specified in claim 1.

With respect to claim 2, Noda teaches the image processing method, further comprising step of: image-processing the extracted each image data based on the image quality adjustment value of respective the image data (image processing the extracted image data in col. 14, lines 27-50).

Maruyama teaches the image processing method, further comprising step of: image-processing the extracted each image data based on the image quality adjustment value of respective the image data (image processing the extracted image data based on the magnification/reduction value in col. 10, lines 28-56).

With respect to claim 3, Maruyama teaches the image processing method, wherein the plurality of image areas can be set by overlapping (fig. 15(a)).

With respect to claim 4, Noda teaches the image processing method, wherein the second preview screen can arrange and display an image of the image data different from the input image data, in addition to the image of the area which is extracted from the image displayed on the first preview image screen (fig. 16 showing another cropped image data from a different input image data).

With respect to claim 5, Noda teaches the image processing method, further comprising:

displaying the obtained input image data on a third preview screen so that image on plural frames is displayed as an image on the third preview screen (second sub display area 39 for displaying plurality of images for selection in col. 14, lines 22-26 & fig. 16),

selecting images in the displayed images on plural frames so as to trimming the image data (selecting one image from the display area 39 for trimming in col. 14, lines 17-26),

extracting the selected images (displaying the selected image in fig. 16), and displaying the extracted images in addition to the image in the set plurality of areas which is arranged on the second preview screen (displaying the another extracted image in the main display area 37 in col. 15, lines 12-26). As previously noted above, the method of extracting a plurality sub image data is taught by Maruyama.

With respect to claims 13 and 25, arguments analogous to those presented for claim 1, are applicable.

With respect to claims 14 and 26, arguments analogous to those presented for claim 2, are applicable.

With respect to claims 15 and 27, arguments analogous to those presented for claim 3, are applicable.

With respect to claims 16 and 28, arguments analogous to those presented for claim 4, are applicable.

With respect to claims 17 and 29, arguments analogous to those presented for claim 5, are applicable.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571)272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHAN S PARK/
Examiner, Art Unit 2625

April 14, 2008